

### **REMARKS/DISCUSSION OF ISSUES**

By this Amendment, Applicants amend claims 8 and 9. Accordingly, claims 1-9 are pending in the application.

### **CLAIM OBJECTIONS**

By this Amendment, Applicants amend claims 8 and 9 for clarification.

Accordingly, Applicants respectfully request that the claim objections be withdrawn.

### **35 U.S.C. § 102**

The Office Action rejects claims 1-9 under 35 U.S.C. § 102 over Chaney et al. U.S. Patent 5,926,568 ("Chaney").<sup>1</sup>

Applicants respectfully traverse these rejections for at least the following reasons.

#### **Claim 1**

Among other things, the method of claim 1 includes applying additional geometrical information to a deformable surface model that has been adapted to an object.

Applicants respectfully submit that Chaney does not disclose such a feature.

In one place, the Office Action states that Chaney discloses this feature in FIG. 6, element 177.

Applicants respectfully disagree.

Element 177 discloses that deformable shape loci segmentation can be performed on training images by comparing them to an object template. The result is

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<sup>1</sup> Technically, the Office Action only states that claims 1-3, 8 and 9 are rejected under 35 U.S.C. § 102 over Chaney. However, the body of the Action asserts that claims 4-7 are disclosed by Chaney, and so Applicants understand that all of the claims 1-9 are rejected under 35 U.S.C. § 102 over Chaney. In the event that the claim rejections are not withdrawn in view of the remarks below, then the Examiner is respectfully requested to clarify the record for the subsequent Appeal to follow, and if claims 4-7 are being rejected on any other basis, to provide Applicants with a new non-final Office Action so as to have an opportunity to respond to any such rejections.

an object model with shape variabilities.

Step 177 operates on an object template 100 that Chaney specifically discloses does NOT have any shape variabilities. It is not a model – indeed, Chaney teaches that the output of step 177 produces the object model 195. This is all plainly shown in FIG. 6. It is therefore self-evident that step 177 does not operate on a deformable surface model that has been adapted to an object. More particularly, step 177 does not disclose applying additional geometrical information to a deformable surface model that has been adapted to an object.

So FIG. 6, element 177 does not disclose applying additional geometrical information to a deformable surface model that has been adapted to an object.

The “Response to Arguments” the Office Action states that “*Numerals 100 contains functionality that allows a user to edit the template to be a desired shape, which is an adapted deformable surface model of the object. This model is further utilized by applying additional images to the model during comparison.*”

Applicants respectfully submit that this is inaccurate, and even if it was accurate, it does not even state that Chaney discloses the features that are actually recited in claim 1.

As explained above, element 100 of Chaney is an object template that Chaney specifically discloses does NOT have any shape variabilities. This object template 100 is not deformable - only the object model 195 is deformable. The object template 100 is not a deformable surface model that has been adapted to an object.

Furthermore, claim 1 does not recite “*applying additional images to the model during comparison.*” Claim 1 recites “*applying additional geometrical information*” to a deformable surface model that has been adapted to an object. “*Additional images*” is not “*additional geometric information.*” So the “Response to Arguments” does not even actually state that Chaney disclose the actual features recited in claim 1.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is patentable over Chaney.

Claims 2-4

Claims 2-4 depend from claim 1 and are deemed patentable for at least the reasons set forth above with respect to claim 1.

Claim 5

Among other things, the method of claim 5 includes integrating additional geometrical information into a deformable surface model of an object.

The Office Action states that Chaney discloses this feature in FIG. 6, element 177.

Applicants respectfully disagree.

As discussed above, FIG. 6, element 177 is a step in the process of creating a deformable surface model from an object template. It does not integrate additional geometrical information into a deformable surface model of an object.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 5 is patentable over Chaney.

Claims 6-7

Claims 6-7 depend from claim 5 and are deemed patentable for at least the reasons set forth above with respect to claim 5.

Claims 8-9

Claims 8 and 9 each recite applying additional geometrical information to a deformable surface model that has been adapted to an object.

As explained above with respect to claim 1, Chaney does not disclose such a feature.

Accordingly, for at least these reasons, Applicants respectfully submit that claims 8-9 are patentable over Chaney.

**CONCLUSION**

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-9 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D.

Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

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